

# Practice Attitude QUIZ

**Waste Management**

# Part 1: About this Waste Management Resource

# QUIZ

## Guidance

The Practice Aptitude Quiz is intended to be a general illustration of some of the key learning standards required of people attempting an Australian Apprenticeships entry level qualification in the Waste Management Industry.

**This Practice Aptitude Quiz is neither a formal tool nor a direct pre-requisite for any job application.**

This quiz has been developed with the assistance of industry, TAFE and the secondary school sector as a careers resource.

The quiz focuses on literacy, numeracy, comprehension and problem solving questions contextualised to this specific industry.

The quiz can be utilised by numerous organisations and people such as careers practitioners working with young people, Group Training Organisations and Job Services Australia providers working with job seekers.

## The Practice Aptitude Quiz can be:

- > Used by careers practitioners with individuals or in a class setting to provide general guidance on the level of study involved in undertaking an entry level qualification in this industry;
- > Provided to people to enable them to practice their skills before sitting an actual aptitude test;
- > Used by Mathematics teachers as a guide to industry maths requirements at the entry point of this particular Australian Apprenticeship;
- > Used by teachers as classroom based activities for students in Year 12 VET Waste Management studies.

The level of reading, writing and mathematical skills assessed by this quiz is equivalent to that of a typical young person at Year 10 level.

Please note that rates quoted in this assessment for various items, including pay rates, are not meant to reflect today's values, but are used purely for mathematical purposes.

The quiz should be able to be completed in approximately 90 minutes.

Calculators may be used to complete this practice exercise.

Answers are located at the end of the quiz.

## Occupational Information and Job Hunting Resources

Information and links on the Waste Management Industry, careers, job prospects as well as career websites and job hunting resources can be found at [www.aapathways.com.au/Career-Resources](http://www.aapathways.com.au/Career-Resources).

## After the Quiz

There are a range of support services available to help you find out about courses that may help you improve your literacy and numeracy skills and also your readiness for work. If you are still at school you should discuss any concerns you may have with your career advisor. Further information may also be provided by a Job Services Australia provider, an Australian Apprenticeships Centre, a Group Training Organisation or a training provider.

## Useful Contacts

Here are some links to job seeker support services:

- > Search for your local Australian Apprenticeships Centre - [www.aapathways.com.au/aac](http://www.aapathways.com.au/aac)
- > Find a local Group Training Organisation - [www.grouptraining.com.au/Find/find\\_gto.html](http://www.grouptraining.com.au/Find/find_gto.html)
- > Job Services Australia providers work with eligible job seekers to develop an individually tailored Employment Pathway Plan. The plan maps out the training, work experience and additional assistance needed to find job seekers sustainable employment - [www.jobsearch.gov.au/provider/default.aspx](http://www.jobsearch.gov.au/provider/default.aspx)

## Part 2: The Quiz

# QUIZ

### Section 1 - Literacy, Reading and Comprehension

1. Put the following words in alphabetical order:

Words	Alphabetical order
Composting	
Landfill	
Transfer stations	
Asbestos	
Recycling	
Medical	
Transport	
Waste	
Paper	
Plastic	

2. The following text has four errors in the spelling or punctuation. Identify the errors and write them correctly below.

This transfer station does not accept items such as cardbord boxes or chemicals in contanors made from metal or plastic. We will accept chemicals in an aproved drum that is sealed tight.

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3. Read the following information and then answer the questions that follow.

#### Customer service

John drives a recycling truck and collects recycling bins for “Gordon Recycling”, a company that is contracted by a local council to provide a recycling service to their residents.

During his daily run John makes a trip to the recycling centre to unload the truck then resumes his daily run to complete the bin pickups for his designated area.

When John returned to his designated area he received a mobile phone call from his supervisor indicating that the council had received concerns from two residents. The first resident, who resided on Smith Street, was upset that his bin had been missed earlier in the morning and would like to have it collected.

The second resident, from Thompson Road, was concerned his bin would not be collected because he had excess recycling due to a party he had had over the weekend. John's supervisor asked if he could assist the resident if he had available space in his collection vehicle.

As John was still completing his daily run he thought he would drive by Smith Street to collect the bin he missed. When he arrived the resident stated he had slept in and forgot to put his bin out and hoped he hadn't caused John any trouble.

John spoke with the resident and explained to him that the council monitors concerns about contractors such as his company. He said his company must respond to the council to show that they are providing the recycling service correctly, and that the residents are satisfied with the service.

John said that he would indicate the resident had slept in so his supervisor could close off his report. The resident said he would ring the council back and say he had put his bin out late and compliment the driver and the recycling company for returning.

As his truck had just been unloaded, John then continued on to Thompson Road to discuss the second concern with a resident. John said he would be able to take the excess recycling this time as he had the room on his vehicle. John then informed the resident if he was planning another party he should contact council prior to the event to organise another bin and request an extra collection. John explained he didn't always have the room on his vehicle and he didn't want to refuse the resident's request or cause the resident to become upset.

John then rang his supervisor and informed him of the outcome of the concerns and the actions he took to rectify each situation. John explained both residents were very satisfied with the service and understood their requirements on collection day.

This allowed John's supervisor to complete the report on each concern and email them to the council. The report demonstrated that the company was meeting the service standards that the council requires them to maintain.

**a. Why was John able to handle each concern immediately?**

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**b. What did the resident who put his bin out late say he would do after talking to John?**

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- c. What advice did John give to the resident in Thompson Road to ensure he does not have the same concern again?

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- d. Why does “Gordon Recycling” have to follow through on concerns?

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- e. Why is it important for John to relay the outcome of the concerns to his supervisor?

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4. Read through the following weighbridge document and then answer the questions that follow.

ARRT Weighbridge – Smithfield					
Date:	23/06/2013	Delivery Number:	012345670	Location:	Smithfield
Time:	10:00 am	Transporter:	John - Gordon Recycling	Waste Type	Paper
Gross:	14 tonne	Tare:	10 tonne	Pay Rate:	4 tonne
Price per tonne:	\$100.00	Total Payment:		Scanned out:	10:10 am
Authorised By:	Peter W Bridge				

- a. What is the date on this invoice?

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- b. What is the name of the company that owns the weighbridge?

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- c. What price is the paper per tonne?

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- d. Calculate the total payment for the load of paper and insert the result in the weighbridge document on the previous page.

5. The waste management industry presents many challenges with regards to manual handling. Below is a procedure used by many organisations within the industry. Read the following procedure and answer the questions below.

Safe lifting procedure	
To minimise the incidents of manual handling injuries staff should follow this procedure.	
>	Before you lift anything, assess the load so you know if it is very heavy.
>	<p>If you must lift and carry heavy loads, use the following correct techniques:</p> <ul style="list-style-type: none"> <li>• Keep the load close to the body to ensure you will not have to reach out to pick up.</li> <li>• Lift with the thigh and leg muscles and have your feet well balanced so you do not overbalance.</li> <li>• Lift with your legs, not your back.</li> <li>• Keep your back as straight as possible.</li> <li>• Get a firm grip with both hands so the load does not slip when lifting.</li> <li>• When you pick up or set down a load, do not reach more than 10 inches away from your body.</li> <li>• Lower your body without bending your back.</li> <li>• Do not twist your body.</li> <li>• Use two people to lift and move a heavy load.</li> <li>• Use lifting hooks or fitting handles to loads to reduce reaching when lifting and carrying.</li> <li>• Only do tasks you are trained to do.</li> <li>• If you are not sure about how to lift any load, speak to your supervisor immediately for</li> </ul>

- a. Why do you need to get close to the load before picking it up?

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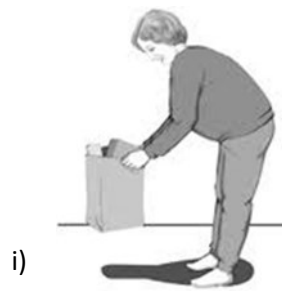


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- b. Are the people in the pictures lifting safely according to the procedure? Why or why not (explain below)?



i)

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ii)

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- c. What should staff do if they are not sure about how to lift a load?

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6. Match the words below with the matching sign or abbreviation in the table.

Measurement

Weight

Cubic Metre

Speed

Money

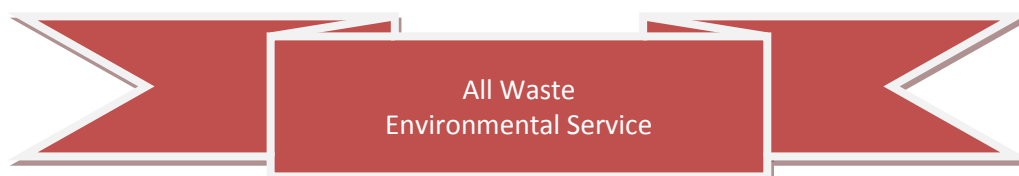
Sign or abbreviation	Matching word
kg	
Km/hr	
Cm	
m(3)	
\$	



7. A customer telephones a transfer station and asks how to dispose of the following waste items:

- > car tyres
- > cans of paint
- > bed mattress

Use the information below to address the questions.



Trading Hours
Monday - Friday
8 am – 5 pm
Saturday 8 am – 1 pm
Sunday - Closed

Disposal Fees
• Tyres \$5.00 per item
• Paint \$2.00 per tin
• Mattress \$15.00 per item

a. What details about the waste items would you need to find out from the customer to ensure that you can calculate a price for the customer?

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b. What would the total cost of the disposal be if the customer had the following?

4 car tyres  
6 cans of paint  
2 mattresses

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c. The customer has suggested he would most likely make the trip to the landfill on Saturday, is there any extra information you should explain or provide?

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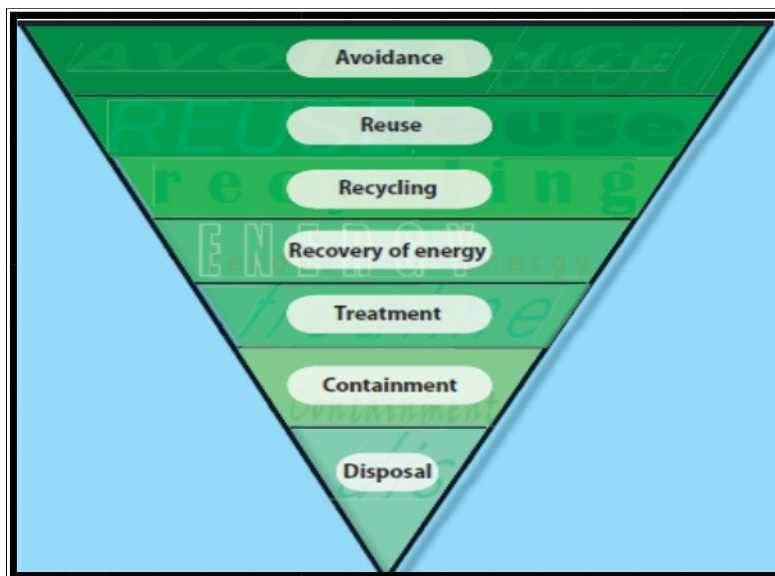


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## Waste identification, hazards and segregation

The waste industry is committed to ensuring, where possible, that waste is considered for recycling or reuse. For this to occur waste must be stored and collected correctly. Issues such as contamination can greatly reduce the chances of recovering the waste streams in collected waste. A simple mistake such as mixing plastic bags with paper in a collection bin can render the bin too contaminated to sort resulting in the load being sent to landfill.

Where possible we should refer to the following waste hierarchy chart to consider how different types of waste may be treated.



When considering this hierarchy keep the following in mind:

### Most Desirable

### WHY

Avoidance (or reduce)	Uses fewer resources
Reuse	Costs less money & more efficient
Recycle	Creates less waste

### Least Desirable

### WHY

Treatment	Uses more resources
Containment	Creates waste and not as efficient
Disposal	Costs money for waste disposal

8. From the following list answer the questions below, keeping the “Waste Hierarchy” in mind.

Using plastic bags for shopping	Steel
Leaving lights on when not in a room	Plastic water bottles
Tin cans	Leaking taps
Glass bottles	Food scraps
Timber	Leaving appliances on when not in use
Clothing	Concrete
Driving to work rather than using public transport	News papers
Using a bicycle	Using energy saver light bulbs

- a. What items on the list would it be beneficial to avoid?

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- b. What items can be recycled?

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9. Match the waste type with the treatment process most likely to receive it. (Each facility may take more than one item).

Plastic	Asbestos	Hospital waste	Paper
Glass bottles	Cardboard	Green waste	Nappies
Timber	Pit water	Television	Oil/chemicals
Metal	Food scraps	Mattress	

Waste type	Treatment process
	Landfill
	Organic recycler
	Recycling facility
	Transfer station
	Steel recycler
	Medical waste facility
	Water treatment facility
	E-waste recycler

## 10. Vehicle inspection

Study the vehicle checklist below and answer the questions that follow.

Vehicle Inspection Form			
Driver			
Date			
Vehicle Rego	WAS - 123		
Start Time & Odometer			
Beak Time	11.45 am		
Finish Time & Odometer			
Correct Personal protective Equipment (PPE)	Vest Boots	Long Sleeve shirt Cap	Gloves Sunscreen
Service Due	Y N		

### Visual Check before starting vehicle:

	AM	PM
ENGINE OIL.....	"	"
TRANSMISSION OIL .....	"	"
WATER LEVEL.....	"	"
TYRE/WHEELS 100 psi.....	"	"
FUEL LEVEL.....	"	"
HEAD LIGHTS – TAIL LIGHTS.....	"	"
INDICATORS.....	"	"
STOP LIGHTS.....	"	"
GAUGES.....	"	"
DRIVERS RUN BOOK – MAPS.....	"	"
FIRE EXTINGUISHER.....	"	"
FIRST AID KIT.....	"	"
SUN SCREEN.....	"	"
WINDSCREEN.....	"	"
MIRRORS.....	"	"
SEATBELTS.....	"	"
CABIN NEAT/TIDY.....	"	"
EXTERIOR CLEAN.....	"	"
SIDE ARM GREASED.....	"	"
GRAB BELT OK .....	"	"
BOLTS & HOSES TIGHT.....	"	"
HYDRO – FLUID FULL.....	"	"

MATERIAL	WEIGHT	DOCKET NO

DRIVER NAME	
DRIVER SIGNATURE	

### Visual Check when vehicle is started:

REVERSE BEEPER.....	"	"
PARK BREAK TEST.....	"	"
WIPERS.....	"	"
2 WAY RADIO.....	"	"
BEACON LIGHT.....	"	"
WORK LIGHTS.....	"	"
CAMERA.....	"	"
BRAKES OK.....	"	"

Vehicle Fault	Reported by	Repaired By	Time & Date

**You are completing an inspection of the vehicle at the end of your shift.**

**Complete the vehicle checklist on the previous page by including the following:**

- a.** The date is 25/3/14 & use you own name.
- b.** Report the following vehicle faults: right indicator not working, reverse beeper not working & left stop light not working.
- c.** The material is paper with a weight of 4000 kg & the docket number is 09876345.
- d.** Circle the PPE that will provide protection from the sun on a hot day.
- e.** The odometer at the beginning of the shift is 85000 and 85065.

## Section 2 - Mathematical and problem solving questions



Complete the following calculations with or without a calculator.

1. Complete the following additions.

a.    \$17.00  
     + \$28.00

\_\_\_\_\_  
\_\_\_\_\_

b.    \$3.50  
     + \$0.48

\_\_\_\_\_  
\_\_\_\_\_

c.    \$5.70  
     + \$3.60

\_\_\_\_\_  
\_\_\_\_\_

d.    \$250.00  
     + \$63.20

\_\_\_\_\_  
\_\_\_\_\_

2. Complete the following subtractions.

a.    \$170.00  
     - \$25.00

\_\_\_\_\_  
\_\_\_\_\_

b.    \$38.50  
     - \$9.48

\_\_\_\_\_  
\_\_\_\_\_

c.    \$155.70  
     - \$33.60

\_\_\_\_\_  
\_\_\_\_\_

d.    \$1250.00  
     - \$165.00

\_\_\_\_\_  
\_\_\_\_\_

3. Cam is completing his collection round. The truck he is operating has a maximum capacity of 4000 kg collection space. If each bin Cam collects weighs 100 kg how many bins can he collect?

\_\_\_\_\_

4. If Mick has a total capacity of 18 metres on his waste vehicle and he has collected 3.5 metres of waste from Mrs Huynh and 6.5 metres of waste from "Stewarts Chicken Farm", what is the total amount of metres Mick has collected?

\_\_\_\_\_

5. At Branislav's resource recovery facility, space is at a premium with vehicles unloading food scraps, green waste and organic material. Branislav has 100 cubic metres of space for food scraps and is expecting a load of 13 cubic metres on top of the scheduled 17 cubic metres for the day. How much storage space does Branislav have left?

\_\_\_\_\_

6. Jenny is an environmental officer for a local council. Jenny is completing information for a brochure on waste collection for an area within the council. After reviewing statistics Jenny notes there was 8 tonne of plastic bottles collected from 2000 homes. How many kilos were collected from each home? (1 tonne = 1000 kg)

\_\_\_\_\_

7. A customer has given you a \$20.00 note to pay for depositing a trailer load of waste. The gate fee is \$13.75. How much change should you give?

\_\_\_\_\_

8. Pedro has spent his weekend collecting cans and has arrived at your depot. Pedro has collected 11 kilos of cans. For each kilo collected he receives \$4.50. How much money does Pedro receive for the cans?

\_\_\_\_\_

9. A resident has requested a new garbage bin at a cost of \$36.40 and gives the cashier a \$50.00 note. How much change should the resident receive?

\_\_\_\_\_

10. This month "All Waste" is providing a discount of 10% off the usual collection price. Katrina is asked to change the collection price on the website to reflect the monthly discount so customers can see the new reduced prices. What price should she write on the following collection options so they are 10% off the usual price? Complete the signs.

<p>3 meter skip bins:</p> <p><b>\$95.00 per bin</b></p> <p>Reduced price:</p> <p>\$ _____</p>
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<p>6 meter skip bins:</p> <p><b>\$160.00 per bin</b></p> <p>Reduced price:</p> <p>\$ _____</p>
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<p>E-Waste:</p> <p><b>\$5.00 per item</b></p> <p>Reduced price:</p> <p>\$ _____</p>
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11. Carly starts work at 6am and works an 8 hours shift driving a collection vehicle from a waste facility to the manufacturing site. The round trip takes approximately 2 hours to travel and she is required to have 2 fifteen minute breaks per shift. How many trips can Carly make during her shift?

\_\_\_\_\_

12. Brian completed his eight hour shift on Thursday. His rate of pay is \$21.20 per hour and he is also paid an extra allowance of \$7.50 for working in a larger vehicle.

What is his total pay for his shift? \_\_\_\_\_

13. Mike has an area of 8 metres wide, 6 metres long and 1 metre high to receive a delivery of construction waste.

What is the total cubic capacity Mike has to receive the delivery?

\_\_\_\_\_

# QUIZ

14. Paula operates a liquid waste collection vehicle with the capacity to extract 3 litres of liquid waste per second. How many litres can Paula collect in one minute?

\_\_\_\_\_



## Section 1 - Literacy, Reading and Comprehension

1.

Asbestos
Composting
Landfill
Medical
Paper
Plastic
Recycling
Transfer stations
Transport
Waste

2.

accept	<b>Accept</b>
cardbord	<b>cardboard</b>
contanors	<b>Containers</b>
aproved	<b>Approved</b>

- 3.
- John was already 'on the road' returning to complete his daily collection route, so he drove by Smith Street to collect the bin. This ensured he did not have to leave his route adding time to his daily collection run.  
As his truck had just been unloaded there was space for the extra waste the resident in Thompson Road wanted to recycle.
  - Ring the council say he had put his bin out late and compliment the driver and recycling coming for returning.
  - To pre arrange an extra bin from council as John doesn't always have the space on his collection vehicle.
  - The council monitors concerns which contractors such as "Gordon Recycling" must answer to show that they are providing the recycling service correctly, and that the residents are satisfied with the service.
  - To allow John's supervisor to complete the report on each concern and email them to the council. The reports demonstrated that the company was meeting the service standards that the council requires them to maintain.

- 4.
- 23/6/10
  - ARRT Weighbridge – Smithfield
  - \$100.00
  - \$400.00, appearing in the document as:

<b>Total payment</b>	<b>\$400.00</b>
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- 5.
- To ensure you will not have to reach out to pick up.
  - No. The person is reaching out to pick up the item and is lifting without bending their knees.
    - No. The person is not bending their knees when lifting and does not have a straight back.
  - Speak to your supervisor immediately for assistance.

6.

Sign or abbreviation	Matching word
kg	<b>Weight</b>
Km/hr	<b>Speed</b>
Cm	<b>Measurement</b>
m(3)	<b>Cubic metre</b>
\$	<b>Money</b>

- 7.
- The quantity of each of the items.
  - 4 X car tyres \$20.00

6 X tins of paint \$12.00

2 X mattress \$30.00

Total: \$62.00
  - Yes, explain the operation hours for a Saturday and explain the landfill closes at 1pm not 5pm

- 8.
- Avoidance:**

    - Using plastic bags for shopping
    - Leaving lights on when not in a room
    - Plastic water bottles
    - Leaking taps
    - Leaving appliances on when not in use
    - Driving to work rather than using public transport
  - Recycle:**

    - Plastic water bottles
    - Tin cans
    - Glass bottles
    - Food scraps
    - Timber
    - Clothing
    - Steel
    - Concrete
    - Newspapers

9.

Waste type	Treatment process
Asbestos, Nappies	Landfill
Green waste, Timber, Food scraps	Organic recycler
Plastic, Paper, Glass bottles, Cardboard	Recycling facility
Television, Timber, Oil/chemicals, Mattress	Transfer station
Metal, Mattress	Steel recycler
Hospital waste	Medical waste facility
Pit Water	Water treatment facility
Television	E waste recycler

1.

- |        |                     |
|--------|---------------------|
| Driver | <b>Persons Name</b> |
| Date   | <b>25/3/11</b>      |

b.

Vehicle Fault
right indicator not working
reverse beeper not working
left stop light not working

c.

MATERIAL	WEIGHT	DOCKET NO
paper	4000kg	09876345

- d. Cap, Long sleeve shirt, Sunscreen.

e.

Start Time & Odometer	<b>85000</b>
Finish Time & Odometer	<b>85065</b>

## Section 2 – Mathematical and problem solving questions

1.
  - a. \$45.00
  - b. \$3.98
  - c. \$9.30
  - d. \$313.20
2.
  - a. \$145.00
  - b. \$29.02
  - c. \$122.10
  - d. \$1085.00
3. 40 bins
4. 10 metres
5. 70 cubic metres
6. 4 kilograms from each home
7. \$6.25 change
8. \$49.50
9. \$13.60
10. \$85.50 for the 3 metre skip bin  
\$144.00 for the 6 metre skip bin  
\$4.50 for each E waste item
11. 3 trips
12. \$177.10 total  
(169.60 + 7.50 for the allowance)
13. 48 cubic metres
14. 180 litres per minute

## Contributions

This Practice Aptitude Quiz was developed by:



**Australian Apprenticeships Pathways Website** - [www.aapathways.com.au](http://www.aapathways.com.au)

This website, part of the Australian Apprenticeships and Traineeships Information Service, provides sample Australian Apprenticeships job descriptions and links to more Australian Apprenticeships information and resources. The service is funded by the Department of Industry.



**Construction and Property Services Industry Skills Council** - [www.cpsisc.com.au](http://www.cpsisc.com.au)

Construction and Property Services Industry Skills Council (CPSISC) The CPSISC represents the workforce training and development needs of an extremely large and vitally important sector of the Australian economy - the Construction and Property Services Industries.



**Gordon Institute of TAFE** - [www.thegordon.edu.au](http://www.thegordon.edu.au)

As Victoria's largest regional stand-alone TAFE, The Gordon has been helping people gain real skills for real jobs for over 125 years.

With innovative approaches to new technologies and learning strategies The Gordon is playing a key role in ensuring the current and future needs of business, industry and community are being met.



**The Career Education Association of Victoria** - [www.ceav.vic.edu.au](http://www.ceav.vic.edu.au)

The CEAV is the Victorian peak body for secondary school career practitioners, work experience coordinators, VET coordinators and MIPS coordinators. The CEAV provides professional development opportunities for members and also works with business, industry, and the education and training sector.



**Industry Training Australia P/L** - [www.itaust.com.au](http://www.itaust.com.au)

Industry Training Australia (ITA) delivers consultancy services to government and non-government organisations in the education and training sector. ITA develops and delivers information and communication services, including the Australian Apprenticeships Pathways website, for service provider networks and the general public.

**For enquiries about this Practice Aptitude Quiz contact the Australian Apprenticeships and Traineeships Information Service on 1800 338 022.**